

as **Exhibit E**, the results of a nucleic acid sequence comparison between SEQ ID NO:1 and GenBank accession number AF315818; as **Exhibit F**, the information provided by GENBANK regarding accession number AF315818 *Homo sapiens* voltage-gated potassium channel KCNA7 mRNA; as **Exhibit G**, the result of a blast analysis using SEQ ID NO:1 of the present invention when compared to the identified human genomic sequence as identified in clone AC008687.5.

### AMENDMENT

#### **In the specification:**

Please replace the original title with the following title.

--POLYNUCLEOTIDES AND POLYPEPTIDES ENCODING HUMAN ION CHANNEL PROTEINS--

Please replace the original abstract with the following abstract.

A' --Novel human ion channel protein polynucleotide and polypeptide sequences are disclosed that can be used in therapeutic, diagnostic, and pharmacogenomic applications.--

#### **In the claims:**

Please amend claims 1, 2 and 3, so that the text of the amended claims reads as follows.

1. (Amended) An [isolated polynucleotide] expression vector comprising the nucleotide sequence [described in] of SEQ ID NO: 1

A<sup>2</sup> 2. (Amended) An isolated nucleic acid molecule comprising a nucleotide sequence that:

- (a) encodes the amino acid sequence of SEQ ID NO:2; and
- (b) hybridizes under stringent conditions including washing in 0.1xSSC/0.1% SDS at 68°C to the full complement of the nucleotide sequence of SEQ ID NO: 1.

3. (Amended) An isolated nucleic acid molecule comprising a nucleotide sequence that encodes the amino acid sequence [shown in] of SEQ ID NO: 2.